GOVERNMENT OF ANDHRA PRADESH
ABSTRACT

Agriculture & Cooperation Department – Policy on Seed Production through Dr.Y.S.R. Rythu Bharosa Kendralu in the State of Andhra Pradesh - Orders - Issued.

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AGRICULTURE & COOPERATION (AGRI.II) DEPARTMENT

G.O.Ms.No. 52 Dated:18.08.2021

Read:

e-file received from the Vice Chairman & Managing Director, Andhra Pradesh State Seeds Development Corporation Limited, vide F.no.APSDC-11/2/2021-VICHA-APSSDCL.

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ORDER:

In the reference read above, the Vice Chairman & Managing Director, Andhra Pradesh State Seeds Development Corporation Limited has stated that Andhra Pradesh is an agrarian state where farmers need a genetically diverse portfolio of improved crop seed varieties/hybrids suited to a range of agro-ecosystems, farming practices to sustain the productivity of the crops in addition to their resilience to climatic change. Seed is the most vital and crucial input for crop production, one of the ways to increase the productivity without adding appreciably to the extent of land under cultivation by planting quality seed. The response of all other inputs depends on quality of seeds to large extent. It is estimated that good quality seeds of improved varieties can contribute about 20-25% increase in yield. This emphasis the need for increasing the areas under quality seed production.

2. The State of Andhra Pradesh is gifted with favorable agro-climatic conditions for seed production in various crops. This new seed production policy will help in tapping the potential of the state in seed production there by ensures availability of quality seed to the farmers. This policy helps in increasing productivity of agricultural crops by ensuring usage of quality seed and seed replacement rate at farm level. Dr. Y.S.R Rythu Bharosa Kendralu will act as a strong backup for seed production and seed supply chain at village level. The need for achieving optimal seed replacement rate and making villages as seed production hubs will be one of the focus areas in the present seed policy. The seed production through Dr.Y.S.R. Rythu Bharosa Kendralu in the state of Andhra Pradesh in today's context has to be holistic, well-defined and focused towards overall well-being of the farming community. With this backdrop, the Seed production policy is designed to be futuristic, flexible to anticipate and address emerging trends and varietal diversification and identify potential areas for developing as seed production hubs. The major objectives of the seed policy are as follows:

[P.T.O]

1. To make the state of Andhra Pradesh as Seed production hub with farmer's participatory approach.

2. To make Villages self-sufficient in quality certified seed production and availability.

3. To enhance productivity of important crops by enhancing Seed Replacement Rate and Varietal Replacement Rate.

4. To promote seed production, processing and distribution at village level through Dr.Y.S.R. RBK's.

5. To ensure availability of Government Pre-tested quality certified seed to farmers at Dr. Y.S.R. RBK's level.

6. To regulate the seed production activities of the private seed companies in the state

7. To promote interstate Marketing of the seed.

3. The Vice Chairman & Managing Director, Andhra Pradesh State Seeds Development Corporation Limited has further stated that the Seed production Policy integrating Dr.Y.S.R. Rythu Bharosa Kendralu is first of its kind and will lay the basis for comprehensive reforms in the seed industry in the state. It will serve as a mechanism to meet the objectives of sustainable development of agriculture production and productivity and doubling of farmer's income.

4. Government, after careful examination, hereby approved the Policy on Seed Production through Dr.Y.S.R. Rythu Bharosa Kendralu in the State of Andhra Pradesh. The Andhra Pradesh State Seeds Development Corporation Ltd. (APSSDCL) is the nodal agency to implement the Seed Production Policy. The Policy on Seed Production through Dr.Y.S.R. Rythu Bharosa Kendralu in the State of Andhra Pradesh is appended in Annexure.

5. The Vice Chairman & Managing Director, Andhra Pradesh State Seeds Development Corporation Limited, Vijayawada shall take further necessary action in the matter accordingly.

(BY ORDER AND IN THE NAME OF THE GOVERNOR OF ANDHRA PRADESH)

POONAM MALAKONDAIAH, I.A.S.,
SPECIAL CHIEF SECRETARY TO GOVERNMENT

To
The Vice Chairman & Managing Director, APSSDCL, Vijayawada.
Copy to:
The Commissioner of Agriculture, A.P., Guntur.

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The Commissioner of Horticulture, A.P., Guntur.
The Commissioner of Agricultural Marketing, A.P., Guntur.
The Director of Animal Husbandry, Vijayawada.
The Vice – Chancellor, Sri Venkateswara Veterinary University, Tirupathi.
The Vice –Chancellor, ANGRAU, Lam Farm, Guntur.
The Vice –Chancellor, YSR Horticulture University, West Godavari District.
The Director, Andhra Pradesh State Seed Certification Authority, Guntur.
The P.S to the Additional Secretary to Chief Minister.
The P.S to Minister (Agri.).
The P.S to the Special Chief Secretary to Government (Agri.)
The P.S to Principal Secretary to Government, A & C Department.
The General Administration (Cabinet.I) Department.

//FORWARDED :: BY ORDER//

SECTION OFFICER

Annexure

(To G.O.Ms. No.52, Agriculture & Cooperation (Agri.II) Dept., dt:18.08.2021)

I. INTRODUCTION

Andhra Pradesh is an agrarian state where farmers need a genetically diverse portfolio of improved crop seed varieties/hybrids suited to a range of agro-ecosystems, farming practices to sustain the productivity of the crops in addition to their resilience to climatic change. Seed is the most vital and crucial input for crop production, one of the ways to increase the productivity without adding appreciably to the extent of land under cultivation by planting quality seed. The response of all other inputs depends on quality of seeds to large extent. It is estimated that good quality seeds of improved varieties can contribute about 20-25% increase in yield. This emphasis the need for increasing the areas under quality seed production.

II. POLICY RATIONALE

The State of Andhra Pradesh is gifted with favorable agro-climatic conditions for seed production in various crops. This new seed production policy will help in tapping the potential of the state in seed production there by ensures availability of quality seed to the farmers. This policy helps in increasing productivity of agricultural crops by ensuring usage of quality seed and seed replacement rate at farm level. Dr. Y.S.R Rythu Bharosa Kendralu will act as a strong backup for seed production and seed supply chain at village level. The need for achieving optimal seed replacement rate and making villages as seed production hubs will be one of the focus areas in the present seed policy. The seed production through Dr.Y.S.R. Rythu Bharosa Kendralu in the state of Andhra Pradesh in today's context has to be holistic, well-defined and focused towards overall well-being of the farming community. With this backdrop, the Seed production policy is designed to be futuristic, flexible to anticipate and address emerging trends and varietal diversification and identify potential areas for developing as seed production hubs.

III. OBJECTIVES

The major objectives of the seed policy are

1. To make the state of Andhra Pradesh as Seed production hub with farmer's participatory approach.
2. To make Villages self-sufficient in quality certified seed production and availability.
3. To enhance productivity of important crops by enhancing Seed Replacement Rate and Varietal Replacement Rate.

[P.T.O]

4. To promote seed production, processing and distribution at village level through Dr.Y.S.R. RBK's.

5. To ensure availability of Government Pre-tested quality certified seed to farmers at Dr. Y.S.R. RBK's level.

6. To regulate the seed production activities of the private seed companies in the state

7. To promote interstate Marketing of the seed.

IV. NODAL AGENCY

The Andhra Pradesh State Seeds Development Corporation Ltd. (APSSDCL) is the nodal agency to implement the Seed Production Policy.

V. SEED REPLACEMENT RATE (SRR)

SRR is a measure of cropped area covered with quality seed. SRR is having a direct bearing on productivity augmentation and enhancement in farmer's income and is one of the means for achieving goal of doubling the farmer's income.

The following is the SRR stipulated by the Govt. of India.

In Self pollinated crops -33%

In Cross pollinated crops -50%

In Hybrids –100%

In case of the varieties in self pollinated crops the farmers shall be advised and encouraged to replace the Seed at farm level once in every three generations. In case of the often cross pollinated crops, the varietal seed shall be replaced after two generations. In case of the Hybrids, the farmers shall replace the seed every generation.

The current SRR and SRR targets upto 2023-24 of various crops grown in the state are furnished below:

Action plan for Seed Replacement Rate (%) from 2020-21 to 2023-24						
Crop Name	**Seed Type**	**SRR**	**2020-21**	**2021-22**	**2022-23**	**2023-24**
Paddy	Variety	33	89.00	93.00	96.00	100.00
Bengal gram	Variety	33	85.00	90.00	95.00	100.00
Black gram	Variety	33	59.50	70.00	85.00	100.00
Green gram	Variety	33	52.00	68.00	82.00	100.00

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Pigeon pea	Variety	50	77.46	87.00	93.00	100.00
Groundnut	Variety	33	61.50	75.00	88.00	100.00
Paddy	Hybrid	100	100.00	100.00	100.00	100.00
Sorghum	Hybrid	100	100.00	100.00	100.00	100.00
Maize	Hybrid	100	100.00	100.00	100.00	100.00
Cotton	Hybrid	100	100.00	100.00	100.00	100.00

New varieties released by (State Agricultural University)SAUs/(Indian Council of Agriculture Research)ICAR institutes will be introduced into seed chain to enhance Varietal Replacement Rate (VRR).

VI. SEED PRODUCTION

The modalities of the Seed Production, Processing and Supply Chain at Village level integrating the Dr. Y.S.R. RBK's are discussed below.

1. Areas of Seed production:

The seed production shall be organized based on:

a. Agro-climatic zones suitability for various crops and varieties/hybrids.

b. Seed demand at Dr. Y.S.R. RBK level within the state and demand for interstate marketing.

2. Quantum of Seed Production:

The Quantum of Seed production shall be based on the Seed indents placed by the Commissioner of Agriculture in case of Agricultural crops, Commissioner of Horticulture in case of Vegetable crops and Director of Animal Husbandry in case of Fodder crops to the APSSDCL and also based on the market demand within the state and outside the state. The indents shall be placed by the respective department Head of the Department to the APSSDCL one year in advance to plan for seed production.

3. Source Seed to maintain Seed Chain :

The APSSDCL shall Co-ordinate with the State Agri. University/State Horticulture University/State Veterinary University/other State Agricultural Universities/ICAR institutes from time to time and procure the Breeder seed of different crop /varieties released by them & popularly grown by the farmers of the state for maintenance of the seed chain & for further multiplication to obtain the Foundation Seed & Certified Seed. The Parental lines of Hybrids shall be procured by the APSSDCL under proper Germplasm exchange agreement with the SAUs/ICAR Institutes and Private Companies.

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4. Seed Production at Village level :

The seed production shall be organized through:

i. Individual farmers :

The APSSDCL shall enhance its production farmers base. The farmers shall be identified and registered as a seed grower as per the criteria of the APSSDCL.

ii. Farmer Groups :

Group of farmers consisting of 15-20 farmers identified and registered as a seed grower as per the criteria of the APSSDCL shall form into a group and shall participate in the seed production.

iii. Seed Farmer Producer Organizations (SFPOs) :

The Seed Farmer Producer Organizations with the group of farmers having interest in seed production shall be formed by the APSSDCL to take up seed production, processing and packing. The SFPOs shall be under the administrative control of the APSSDCL. The Seed Produced, processed and packed by the SFPOs shall be marketed under the APSSDCL brand name.

The details of the villages identified, suitable and potential for Seed Production of different crop/varieties in different districts of A.P. is given below

S. No.	Name of the District	Crops	No. of Mandals	Foundation Seed production Villages	Certified seed production Villages	Hybrid seed production Villages	Total No. of Villages
1	Srikakulam	Paddy/Millets	21	8	80		88
2	Vizianagaram	Paddy/Millets	25	6	118		124
3	Visakhapatnam	Paddy/Millets	12	2	45		47
4	East Godavari	Paddy/Millets	5	2	30		32
5	West Godavari	Paddy/Blackgram/Greengram	22	11	67	5	83
6	Krishna	Paddy/Blackgram/Greengram	8	4	19		23
7	Guntur	Blackgram/Redgram/Greengram/Bengalgram	10	2	27		29

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8	Prakasam	Redgram/Bengalgram	5	2	10		12
9	Nellore	Paddy	6	2	16		18
10	Chottoor	Paddy/Groundnut	21	7	128		135
11	Kadapa	Redgram/Groundnut/Bengalgram	15	10	70		80
12	Kurnool	Groundnut/Redgram/Bengalgram/Millets	26	31	93	10	134
13	Ananthapuramu	Groundnut/Bengalgram/Millets	30	40	155		195
Grand Total			**206**	**127**	**858**	**15**	**1000**

5. Registration of Seed production plots

The Seed Production plots in each identified village shall be registered with the Dr. Y.S.R. RBKs and with the AP State Seed Certification Authority (APSSCA). The farmers /farmer groups/SFPOs shall enter into seed production agreement with the APSSDCL. The areas identified shall be registered for certification with the APSSCA. The APSSCA shall register the areas duly verifying the farmer and land details. The Seed Production plot details shall registered in the e-crop booking platform by the Dr.YSR RBK incharge.

6. Supply of source seed:

The APSSDCL shall arrange to supply the source seed for seed production viz., Breeder Seed, Foundation Seed and Parental lines in case of Hybrids to the farmers/farmer groups/SFPOs for seed multiplication.

7. Seed multiplication/seed chain maintenance :

i. Breeder Seed to Foundation Seed Production Cycle

The B/s to F/s cycle of seed production shall happen in the specified areas duly following the seed production principles. The Farmers/Farmers groups/SFPOs shall be identified and trained for seed production of this cycle. The services of the Seed Multiplication farms of the Department of Agriculture/ State Agricultural University/ KVKs may be utilized for this cycle of seed production.

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ii. Foundation Seed to Certified Seed Production Cycle

The F/s to C/s cycle of seed production shall happen in the large scale based on the demand survey in the villages identified and found potential for C/s production of various crops/Varieties.

iii. Hybrid Seed Production

The Hybrid Seed production using the parental lines shall happen in the specified areas found favorable for Hybrid Seed Production. The Services of the other National /state agencies may also be utilized for Hybrid Seed production.

The APSSDCL may organize seed production of certain varieties/hybrid seed production in other states based on the suitability of the edaphic and climatic factors.

8. Certification of the seed production plots by APSSCA.

The seed production plots shall be registered for the Certification with the APSSCA for Foundation/ Certified Seed Production. The APSSCA staff shall regularly inspect the fields at regular intervals as per the prescribed seed certification procedures i.e., at vegetative, flowering and pre-harvesting stages of different crop/varieties along with the staff of departments concerned i.e., Agriculture, Horticulture & Animal Husbandry for maintaining field standards of production plots and seed standards prescribed.

9. Seed Procurement, Processing and Storage

The Seed procurement is to be happen at the village level through Dr. Y.S.R. RBKs. The Dr. Y.S.R. RBKs incharge shall closely monitor the seed production plots in the villages. The time of harvesting of Seed crop shall be intimated to the procurement agencies well in advance. The APSSCA officials shall certify the quality of the seed produce in accordance with the Indian Minimum Seed Certification Standards-2013, Department of Agriculture & Co-operation, Ministry of Agriculture Govt. of India before procurement. The Procurement agency viz., APSSDCL shall arrange for procurement of Seed crop from the individual farmer/group of farmers/SFPOs through Dr. Y.S.R. RBKs. APSSDCL shall arrange for Seed processing, packing and storage using the processing and storage facilities available. The APSSDCL shall coordinate with Custom processing centers for carrying out seed processing and storage.

10. Fixation and Payment of Procurement Price

The procurement prices of different crop/varieties shall be fixed by the state level prices fixation sub- committee well in advance of the procurement period. The basis for the fixation of procurement price shall be Minimum Support Price and Incentive to seed production farmer. The Procurement agency shall make timely payment to the seed producers within 15 days.

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11. Seed quality and Testing

The quality of seed shall be ensured at each level of the Seed Production, Seed Processing and Storage by the following agencies.

i. After receipt of area of registrations, the APSSCA officials shall carry out field inspections to verify the genuineness of the seed production in the field (verification of land details, crop details) and confirmatory to the prescribed field standards. The APSSCA officials shall monitor the seed processing at Seed Processing units to ensure seed quality. The APSSCA shall draw seed samples from each lot at the Seed Processing Units as per the prescribed procedure for conducting quality testing in the APSSCA laboratories. The APSSCA shall communicate the Seed quality testing results promptly to the procurement agencies. Once the seed is certified by the APSSCA as "Certified Seed" after field level verification and laboratory test, the APSSCA will be responsible for the quality of the seed.

ii. The Procurement Agencies shall draw seed samples from each lot at the Seed Processing Units as per the prescribed procedure for conducting quality testing in their seed testing laboratories. The Procurement agencies shall regularly inspect the seed production plots for ensuring the Seed quality standards at field level

iii. The Department of Agriculture shall draw the act samples as per the criteria fixed by the Department and conduct the Seed quality tests at the Dr. Y.S.R. Agri. Labs and notified laboratories and communicate the results promptly to label the Seed lots as Tested before supply of the seed.

iv. The Dr. Y.S.R. RBKs in charge at the village level shall closely monitor the Seed production, procurement activities in the villages by coordinating with the procurement agencies and APSSCA.

VII. ROLE OF VARIOUS AGENCIES IN SEED PRODUCTION, PROCUREMENT AND SEED QUALITY MONITORING :

1. State Agricultural University/ State Horticultural University/State Veterinary University

i. The State Agricultural University/ State Horticultural University/State Veterinary University shall supply the Breeder Seed of different crop/varieties and parental lines of hybrids of various crops to the APSSDCL from time to time for further multiplication of Seed Chain. They shall facilitate the APSSDCL in procuring the breeder seed and parental lines for hybrid seed production from other SAU's/SHU's/SVU's/ICAR and private seed companies.

ii. The scientists of the State Agricultural University/ State Horticultural University/State Veterinary University shall regularly inspect the seed production plots in coordination with the APSSDCL, APSSCA, Department of Agriculture and functionaries at the Dr. Y.S.R. RBKs.

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iii. The State Agricultural University/ State Horticultural University/State Veterinary University shall impart training to all the stake holders from time to time in Seed production, processing and seed quality testing technologies.

2. Department of Agriculture/ Department of Horticulture/Department of Animal Husbandry

The field functionaries of the Department of Agriculture/ Department of Horticulture/Department of Animal Husbandry from village level to district level shall coordinate with the Nodal agency i.e APSSDCL in identification of farmers/farmer groups /and in formation of SFPOs, in distribution of Source Seed and shall monitor the Seed production, procurement, processing and seed distribution activities in the villages by coordinating with the APSSDCL and APSSCA.

VIII. CREATION OF INFRASTRUCTURE FACILITIES

The existing seed processing facilities in the state are limited. In order to make the state of Andhra Pradesh as seed production hub, creation of new infrastructure facilities and strengthening of existing facilities will be promoted. Modernization of the existing seed processing facilities will be encouraged in terms of modern equipment and latest techniques, Conditioned storage for breeder and foundation seed and aerated storage for certified seed would be created in different Agro Climatic Zones.

IX. REGULATION OF THE SEED PRODUCTION ORGANIZED BY THE PRIVATE SEED COMPANIES AND OTHER AGENCIES

The State of Andhra Pradesh being the preferred place for organizing the varietal/hybrid seed production, certain private companies and other agencies viz., other State Seeds Corporations and National Seed Corporation are taking up the seed production in certain Districts.

a. If the other state seeds corporations/ NSC organizes the Seed Production in the state of Andhra Pradesh, the appropriate procedure as laid down in policy shall be followed. They shall coordinate with the state nodal agency APSSDCL while organizing the Seed production in the state.

b. The Private Companies organizing the Varietal / Hybrid seed production in the state shall submit their seed production plan well in advance to the Commissioner of Agriculture and register the farmer details with the Dr. Y.S.R. RBKs. They shall enter into legally valid Seed production agreement with farmers and the copies of the agreement shall be deposited at the Dr. YSR RBKs. They shall make timely payment and remunerative price as per the seed production agreement to the seed production farmers.

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X. SEED DISTRIBUTION / SUPPLY THROUGH Dr. Y.S.R. RBKS:

The Seed Distribution/Supply shall happen at the village level through Dr.Y.S.R. Rythu Bharosa Kendralu. The guidelines issued vide the below mentioned GOs for Distribution/Supply of Seed under subsidy programmes / non subsidy programmes shall be followed.

1.G.O.Rt.No.174, Agriculture & Co-operation (Agri-II) Dept., dt:31.03.2021.

2.G.O.Ms.No.65, Agriculture & Co-operation (H&S) Dept.,dt:19.06.2020.

XI. UTILIZATION OF FUNDS UNDER VARIOUS CENTRALLY SPONSORED SCHEMES IN SEED PRODUCTION BY APSSDCL

The state Nodal agency, APSSDCL shall be implementing agency of the funds released under various Centrally Sponsored schemes and Externally Aided projects related to Seed Sector in the state. The APSSDCL shall utilize the funds under CSS in seed production, seed procurement, seed processing, Seed Quality control and seed distribution activities.

XII. INTER STATEMARKETING OF SEED

The APSSDCL shall explore possibilities of interstate marketing of the seed produced in the state. The APSSDCL may produce seed of various crops varieties seeds for supply to other state seed corporations/other state seed agencies duly obtaining indents in advance from them.

XIII. ESTABLISHMENT OF SEED GENE BANK IN THE STATE

The State Agriculture University i.e Acharya N.G. Ranga Agricultural University shall establish and maintain a state level Seed Gene Bank with collection of accessions belonging to all the crops grown by the farming community in the state.

XIV. ESTABLISHMENT OF STATE SEED RESEARCH AND TRAINING CENTRE

It is proposed to establish State Seed Research and Training Centre in the state on similar lines of National Seed Research and Training Centre, Varanasi. The proposed Centre shall work under the administrative control of the Department of Agriculture& Cooperation, Government of Andhra Pradesh.

The major objectives of the proposed Centre are

1. To disseminate the values of seed production and ensure the availability of quality seeds to farming community all over the state

2. To Provide common platform to all agencies and organizations concerned with the seed science at State level

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3. To act as State level seed testing laboratory

4. To Strengthen the Seed Quality Testing Network in the state

5. To Transfer modern technologies in Seed science and technology through organizing various HRD activities.

6. To Co-ordinate with other premier Institute of the country and globe in Seed Science and Technology.

XV. CONCLUSION

This Seed production Policy integrating Dr.Y.S.R. Rythu Bharosa Kendralu is first of its kind and will lay the basis for comprehensive reforms in the seed industry in the state. It will serve as a mechanism to meet the objectives of sustainable development of agriculture production and productivity and doubling of farmer's income

POONAM MALAKONDAIAH, I.A.S.,
SPECIAL CHIEF SECRETARY TO GOVERNMENT